

operating the same, substantially as set forth. 2nd. In combination with a yielding platform C, adjusting bar F and pivoted bar G of the wedge-shaped piece H provided with flat portions *b*, substantially as and for the purpose shown and described. 3rd. In combination with a yielding platform provided with an adjusting-bar of a wedge and suitable mechanism for operating the same, whereby the tension of the springs is adjusted and controlled, substantially as and for the purpose described.

**No. 17,473. Art of Making Textile Imitations of Persian Lamb Peltries.**  
(*Art de faire des imitations de pelleteries de moutons de Perse.*)

Louis Pelland, Berthier, Que., August 11th, 1883; 5 years.

*Claim.*—1st. The described method or mode of producing imitations of Persian lamb peltries containing in sewing a thread or strand of wool into a ground or backing of canvas so as to form a series of loops resembling the peltry curls. 2nd. In the manufacture of imitations of Persian lamb peltries, the forming of two or more of the loops to resemble the curl of Persian lamb wool from one and the same strand or thread as described. 3rd. The combination and arrangement of the canvas *a* with the strand or thread of wool *b* stitched or served into the canvas, substantially as described.

**No. 17,474. Match Dipping Machine.**

(*Machine à plonger les allumettes.*)

Thomas A. Cook, Ottawa, Ont., and Felix Labelle, Hull, Que., August 11th, 1883; 5 years.

*Claim.*—1st. In a match machine, the combination of a furnace and a naked or exposed drying plate heated thereby, a second furnace provided with a sulphur pan, a third furnace provided with a composition pan and mechanism for delivering the composition, and means substantially as described, adapted to convey the match trays over the drying plate, the sulphur pan and the composition pan successively, whereby the splints may be successively dried, dipped in sulphur and dipped in the igniting compound and the heat graduated in each of the furnaces independently of the others as required. 2nd. The combination of a frame A, furnaces F E F<sub>3</sub>, hot plate H, sulphur pan S, composition trough C, roller R, cylinder R<sub>1</sub>, apron *c*, sets of pulleys P<sub>1</sub> P<sub>2</sub> P<sub>3</sub>, spur wheels and carriers W<sub>1</sub> W<sub>2</sub> W<sub>3</sub> W<sub>4</sub> *et al*, endless bands or chains E<sub>1</sub> E<sub>2</sub> E<sub>3</sub>, steam jet J and fan F with tubes and distributor T. 3rd. In combination with a match dipping machine, a steam heated cylinder R<sub>1</sub> and roller R upon which is mounted an endless apron *c* dipping into the composition and secured to an endless chain E by which the apron is kept off the surface of the cylinder and roller, the cylinder and roller suitably journaled in the composition trough. 4th. In combination with the composition-applying mechanism of a match dipping machine, a steam jet J for the purpose of keeping moist those parts not immersed in the composition during the time the machine is stopped. 5th. In combination with the match dipping machine, a fan F, tubing *t* and perforated distributor T for the purpose of playing upon and cooling the match splints after being dipped in sulphur. 6th. In a match machine, the combination of a tray or vat to receive the composition and endless apron acting therein and a hollow steam-heated roll sustaining an apron as described. 7th. The combination of the following elements, a drying furnace, a composition pan, an air delivery device, a composition furnace provided with delivery mechanism and conveyers, substantially as described, for automatically delivering the match frame to said mechanism in the order named. 8th. In a match machine, the combination of a drying furnace, a sulphur pan and composition pan with the three pairs of endless belts, and the intervening plates *b*, whereby the matches are presented to the three furnaces in succession. 9th. In combination with the sulphur pan, the composition pan and the mechanism for transferring the splints from one to the other, the air blast mechanism arranged to deliver a blast upon the matches between the two pans, all substantially as described and shown and for the purpose set forth.

**No. 17,475. Telephone Transmitters.**

(*Transmetteur téléphonique.*)

James A. Lakin, Westfield, Mass., U. S., August, 11th 1883; 5 years.

*Claim.*—1st. The combination, in a telephone transmitter, of a diaphragm secured therein and included in a battery circuit, an adjusting spring fixed at one end, a contact spring secured to and adapted to be moved by said adjusting spring and with one or more electrodes interposed between the free end of said contact spring and the diaphragm, and an adjusting screw to be turned against said adjusting spring to adjust the contact pressure between the free end of said contact spring and the diaphragm or the interposed electrodes, substantially as described. 2nd. The combination, in a telephone transmitter, of an adjusting spring fixed at one end, a contact spring secured to said adjusting spring and with its free end extending to a point in rear of said diaphragm, and operated in its movements by that of said adjusting spring, and an adjusting screw to be turned with more or less force against the free end of the adjusting spring to move the free end of the contact spring, substantially as described. 3rd. The combination, in a telephone transmitter, of a diaphragm secured therein and provided with a carbon button, the adjusting spring fixed at one end, the contact spring secured to and adapted to be moved by the adjusting spring and provided with a carbon button, a platinum point or electrode secured in one of said buttons to make contact against the other button and an adjusting screw adapted to be turned against said adjusting spring to adjust the pressure of said platinum point or electrode against the opposite button, substantially as described.

**No. 17,476. Thill Coupling.**

(*Armon de limonière.*)

Jerome C. Dietrich, Galt, Ont., August 11th, 1883; 5 years.

*Claim.*—1st. In a thill-coupling in which the thill has a hooked end

to fit over the bolt passing through the draw jack, the combination of a looped spring plate designed to fit between the jaws of the draw-jack behind the thill, the loop in the plate being curved to extend over the top of the thill, substantially as shown and described. 2nd. In a thill coupling in which the hooked end of the thill is held in position by a looped spring plate fitted between the jaws of the draw-jack behind the thill, a pin or projection formed either to fit over the said projection when the spring plate has been pressed home, substantially as and for the purpose specified. 3rd. In a thill coupling in which the hooked end of the thill is held in position by a plate fitted between the jaws of the draw-jack behind the thill, the combination of an enlarged end formed substantially as described on the hook of the thill so that it cannot be lifted out of the jack until the plate has first been removed substantially as and for the purpose specified.

**No. 17,477. Fire Back for Stoves and Ranges.**  
(*Dos de poêles et de landiers.*)

George A. Way, Middleville, Mich., U. S., August 11th, 1883; 5 years.

*Claim.*—1st. The system of grooves cast in the rear face of the fire-back to facilitate its adjustment to fire boxes of different depths, substantially as set forth. 2nd. The centre piece A provided with longitudinal lugs constructed to form a dove-tail recess wholly outside the main body of said centre piece, in combination with a side piece having a dove-tail shaped tongue to fit into said recess having one of its surfaces in line with the portion of said plate that comes in contact with the back of the centre piece. 3rd. The centre piece A provided with longitudinal lugs *a a* and *b b* constructed to form recesses outside the main body of the centre piece and arranged on different horizontal planes, in combination, with two side pieces B and D having dove-tail shaped tongues C E adapted to fit said recess, all constructed, arranged and operating substantially as shown and described.

**No. 17,478. Nut Lock for Fish Plates.**

(*Noix de sûreté pour les éclisses.*)

James Wilkes, Winnipeg, Man., August 11th, 1883; 5 years.

*Claim.*—1st. The combination with the plate A having apertures B and a tongue E, of the locking plate G provided with prongs H and a tongue M, substantially as shown and described and for the purpose set forth. 2nd. The combination with the plate A having apertures B and a tongue E pressed out of the plane of the plate and having a recess F in its upper end, of the locking plate G provided with prongs H and a tongue M, substantially as shown and described and for the purpose set forth. 3rd. The combination with the plate A having apertures B C and a tongue E, of the locking plate G having prongs H R, and a tongue M pressed out of the plane of the plate G, substantially as shown and described and for the purpose set forth. 4th. The combination with the plate A having apertures B C and a tongue E, of the locking plate G having prongs H R and a tongue M pressed out of the plane of the plate G and provided with a recess N, substantially as shown and described and for the purpose set forth.

**No. 17,479. Attachments to Automatic Gates.**  
(*Barrière automatique.*)

John F. Lukens, West Mansfield, Ohio, U. S., August 11th, 1883; 5 years.

*Claim.*—1st. The combination with a gate having a lower hinge of any suitable kind, of an upper hinge consisting of a hinge-strap and of a rod bent to form a double crank and a lever arm, the crank passing through the hinge-strap and attached to the hinge post above and below the double crank while the lever arm is extended above the post and provided with pulley-cords or wires, whereby the gate may be opened or closed from a distance, substantially as described. 2nd. In combination with the elongated perpendicular slot I, the gate arranged to tilt backward raising the latch H until it swings free of the post, substantially as set forth. 3rd. The combination, with the double crank shown, of the hinge G, eye-seat D and hook-bearing E as and for the purpose specified.

**No. 17,480. Apparatus for Preserving Alimentary Substances.**  
(*Appareil pour conserver les substances alimentaires.*)

Carl M. Pielsticker, London, Eng., August 11th, 1883; 5 years.

*Claim.*—1st. The composition and use of an antiseptic salt for preserving alimentary substances, containing Boracic Acid, Phosphate of Soda, and Formate of Soda in such proportions as to render the Boracic Acid completely soluble and to produce a practically tasteless salt, preferably composed as hereinbefore described. 2nd. The process of preserving alimentary substances by first treating them with an antiseptic, as described in claim 1, and subsequently placing them in air-tight chambers or vessels in which the atmospheric air has been removed and replaced by a mixture of carbonic acid and carbonic oxide gases in certain definite proportions, or from which the mixture of these gases has been subsequently removed and replaced by a partial vacuum or by keeping a constant current of mixture of these gases in certain definite proportions passing through the preserving chambers, substantially as described. 3rd. The combination and use of a gas producer having openings for the admission of atmospheric air near the top of a cylinder for the purpose of oxidizing the vapours of carbonic oxide produced from the combustion of coke to a certain definite extent into carbonic acid gas and of so producing a mixture of carbonic acid and carbonic oxide gas in certain definite proportions, substantially as hereinbefore described.

**No. 17,481. Stove Board.**  
(*Sous-poêle.*)

William P. Cole, Montreal, Que., August 13th, 1883; 5 years.

*Claim.*—As an improved article of manufacture, a stove-board constructed of a base or foundation A of wood, mill or straw-board, or textile fabric having a covering B of asbestos applied in a sheet or in a plastic state and secured adhesively by cement.